TECHNICAL ASSISTANCE IN FISHERIES MONITORING CONTROL AND SURVEILLANCE: A HISTORICAL PERSPECTIVE OF FAO'S ROLE

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National Marine Fisheries Service
2570 Dole Street
Honolulu, Hawaii

David J. Doulman
Senior Fishery Planning Officer
FAO Fisheries Department

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
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PREPARATION OF THIS PAPER

This document was prepared at the request of the United States Department of State as a contribution for the Global Fisheries Enforcement Workshop, held in Washington DC, USA, from 25 to 27 October 1994. The paper summarizes technical assistance provided by the Food and Agriculture Organization of the United Nations in the field of monitoring, control and surveillance to its developing members since 1980.

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ABSTRACT

This paper provides a summary of technical assistance rendered since 1980 by the Food and Agriculture Organization of the United Nations (FAO) to its developing members in the field of fisheries monitoring, control and surveillance (MCS). Following the introduction the international and national legal aspects of MCS are discussed briefly in the context of fisheries conservation and management. The origin of FAO's MCS programme of technical assistance is then outlined. Over the period 1980 to 1994, the geographical distribution and type of MCS technical assistance provided by FAO is analyzed. MCS funding sources are addressed in the next section of the paper and a qualitative assessment made concerning the impact that FAO's MCS technical assistance has had on fisheries conservation and management efforts in recipient States. The paper concludes that it is anticipated that a high level of demand will remain for MCS technical assistance in view of the (i) increasing recognition of the fundamental importance of MCS in fisheries conservation and management, and (ii) increased and new international conservation and management responsibilities associated with Agenda 21: The United Nations Programme of Action from Rio, the implementation of the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, and the outcomes of negotiations for the Code of Conduct for Responsible Fishing, and the United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks.

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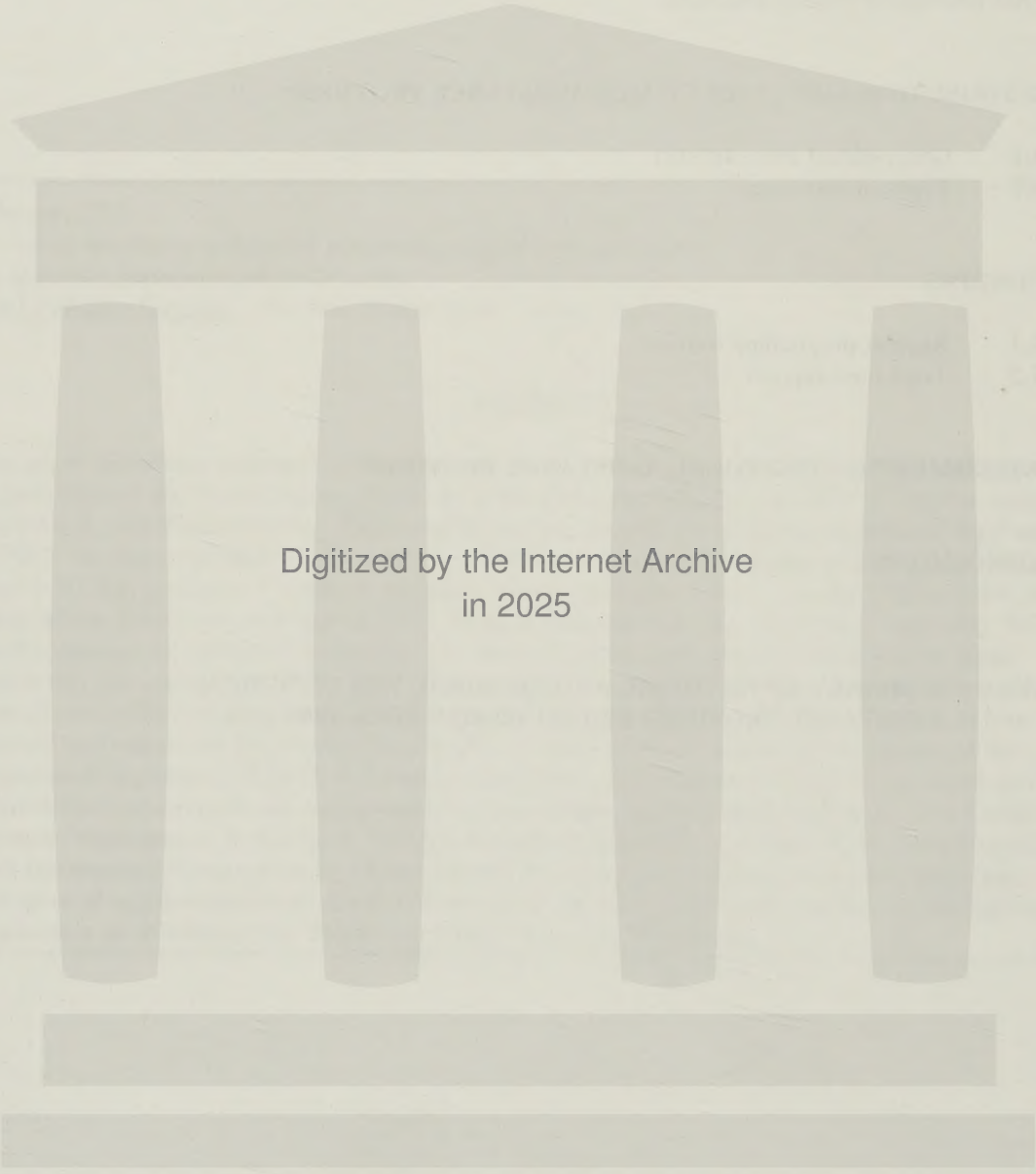

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1. INTRODUCTION

Since 1980 the Food and Agriculture Organization of the United Nations (FAO) has provided its developing members with dedicated policy and technical advice, and training, relating to fisheries monitoring, control and surveillance (MCS).[1] In the mid to late 1970s two considerations figured significantly in FAO's assessment of the need for such technical assistance. These considerations were the (i) deliberations of the Third United Nations Conference on the Law of the Sea (UNCLOS), and (ii) recognition of the central importance of MCS to effective fisheries conservation and management.

The UNCLOS (1973-1982) led to the adoption of a new international legal regime for the management of the world's oceans, the 1982 United Nations Convention on the Law of the Sea (1982 Convention).[2] Shortly after the commencement of the UNCLOS the international community agreed that in order to secure enhanced fisheries conservation and management, States would need to be given additional jurisdiction over fisheries resources adjacent to their coasts. This recognition had major implications for MCS policy and operations in that coastal States would be required, in future, to monitor and enforce fisheries conservation and management measures, no longer within a narrow territorial sea of 12 miles but rather over a much greater area in an exclusive economic zone (EEZ) extending upto 200 nautical miles from the coast.

In 1979 the FAO Conference considered international fisheries developments and in particular the impact of the UNCLOS on national fisheries conservation and management, and in resolution 4/79, adopted by the Conference on 27 November 1979, invited "...the Director-General to continue and intensify efforts to mobilize the financial, technical and other forms of assistance required to implement the Programme of Assistance in the Development and Management of Fisheries in Exclusive Economic Zones".[3] It was this resolution that gave impetus to establish a specific programme for the conservation and management of EEZ fisheries resources, to be known as the FAO EEZ Programme.[4]

In addition to international developments related to the elaboration of the 1982 Convention, FAO continued to stress in fisheries policy and technical advice provided to its developing members, that the implementation of conservation and management measures in EEZs would be unlikely to bring sustained long-term benefits in the absence of sound, reliable and cost-effective MCS systems. This was necessary to ensure that fisheries conservation and management measures adopted were observed and implemented.

FAO also stressed the need for developing members to receive fair compensation for fish harvested by foreign fleets within their respective EEZs, and for measures to be adopted that would minimize unauthorized fishing. To this end FAO sponsored a number of workshops to assist developing members design and

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[1] MCS policy and technical advice, and training, is referred to generally in this paper as MCS technical assistance.

[2] United Nations. 1983. The Law of the Sea: United Nations Convention on the Law of the Sea. United Nations. New York. 224p. The 1982 Convention was signed on 10 December 1982 and it will enter into force on 16 November 1994, twelve months after the deposit of the sixtieth instrument of ratification or acceptance.

[3] FAO. 1979 (Twentieth Session, Rome 10-28 November). Report of the Conference of FAO. FAO. Rome. pp. 28-32.

[4] The objectives of this programme were to (i) strengthen the capabilities of coastal countries and groupings of countries to manage and develop their fisheries, (ii) promote rational management and the full use by developing countries of fishery resources in their EEZs, and (iii) strengthen efforts of developing countries to secure a greater share of, and higher benefits from, living marine resources as part of initiatives to establish a New International Economic Order.

implement policies and practices for the collection of fisheries data and access fees from foreign fishermen.[5] Moreover, the possibility of using fisheries joint ventures as a form of international collaboration and as a means of extracting reasonable financial returns for fish taken within the EEZs of developing members was promoted by FAO.

In concert with, and in support of, the provision of MCS technical assistance, FAO also provided its developing members with legal advice to (i) facilitate the revision of national fisheries legislation, (ii) harmonize fisheries legislation on a regional basis,[6] (iii) training and seminars. This assistance was provided primarily to (i) bring national fisheries legislation in line with the provisions of the 1982 Convention, (ii) harmonize legislation of regional groupings for consistency and efficiency reasons, (iii) enhance national capacity in the legislative and fisheries law area, and (iv) ensure that there was an unambiguous and appropriate legal base in support of the adoption and implementation of fisheries conservation and management arrangements.

2. LEGAL CONSIDERATIONS

The 1982 Convention provides, inter alia, the international legal framework for the conservation and management of living marine resources. Separate legal regimes are specified for the conservation and management of resources (i) within areas of national jurisdiction, and (ii) on the high seas.

Part V (articles 55 to 75) of the 1982 Convention concerns the rights, duties and responsibilities of States with respect to the conservation and management of living marine resources within their EEZs. In article 61, requirements for the conservation of these resources of the EEZ are set forth, while in article 62 4 (k) requirements relating to the utilization of living resources are addressed. In very general terms, these two articles oblige States to (i) adopt conservation measures to ensure that the living marine resources falling within their respective EEZs are not over-exploited and that stocks are maintained in a healthy condition, and (ii) ensure that living resources are utilized optimally.[7]

Article 73 of the 1982 Convention focuses on the enforcement of national fisheries laws and regulations adopted by coastal States. The intent of this article is to provide coastal States with the means to enforce

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[5] These workshops were not directly related to MCS but they had a significant bearing on it. The workshops were funded under the FAO/Norway EEZ Programme in Sri Lanka in 1980 (FAO/IOC/UNCTC Indian Ocean training workshop on joint ventures and other commercial arrangements), Morocco in 1983 (FAO/CECAF workshop on joint ventures and other commercial arrangements), in the Seychelles in 1984 (FAO/SWIO workshop on the control of foreign fishing operations), in Peru in 1985 (SELA/FAO/UNCTC workshop on joint ventures and other commercial arrangements), and Peru in 1986 (SELA/FAO/UNCTC training workshop on joint ventures and other commercial arrangements). See Doucet, F. J., C. Fernando, M. Hauge and G. Ulfstein. 1987. "Report of the FAO/Norway evaluation of the EEZ umbrella programme". FAO Report (FI:GCP/INT/441/NOR). FAO. Rome. (mimeo). 119p.

[6] Under the FAO/Norway Programme, regional workshops on harmonization of activities and legislation were held in Fiji in 1982 (FFA workshop on harmonization and coordination of regimes), St. Lucia in 1983 (FAO/OECS workshop on harmonization and coordination of fishery regimes), in Antigua in 1983 (FAO/OECS workshop on harmonization and coordination of fishery regimes), and in St. Lucia in 1984 (FAO/OECS workshop on harmonization and coordination of fishery regimes). For details see Doucet, F. J., C. Fernando, M. Hauge and G. Ulfstein. 1987. "Report of the FAO/Norway evaluation of the EEZ umbrella programme". FAO Report (FI:GCP/INT/441/NOR). FAO. Rome. (mimeo). 119p. In addition, under FIMLAP two reports (91/8 and 91/8 (Rev 1) was prepared for the OECS on legislation harmonization. See de Almeida, J. J., R. L'Hereux, T. Loebach, and H.D. Walters. 1992. "Fisheries Management and Law Advisory Programme report of the joint review mission". FAO Report GCP/INT/466/NOR Field Report 92/23. FAO. Rome (mimeo). 52p.

[7] States can determine independently what level of fishing is 'optimal' for their respective EEZs. What is important for developing States is their capacity (in terms of political and economic power) to determine how much fishing should be permitted within their EEZs and at what price.

fisheries conservation and management measures and to achieve optimal resource utilization, as required in articles 61 and 62. In article 73 coastal States may, in enforcing fisheries laws and regulations, undertake a range of MCS activities within their respective EEZs, including the boarding, inspection, and arrest of national and foreign flag fishing vessels,[8] and where necessary, institute appropriate judicial proceedings against violators in order ensure compliance with conservation and management measures adopted and implemented under national fisheries legislation.

States enact national fisheries legislation with the principal objective of ensuring that fisheries resources are regulated and exploited in an orderly and sustainable manner, and that current usage of these renewable resources does not prejudice their use by future generations. Depending on national situations and circumstances relating to fisheries, the fisheries legislation normally provides for the adoption of a range of administrative and conservation and management measures. Such measures may restrict both inputs (fishing effort) and outputs (catch) in a fishery, and provide for the necessary control and enforcement measures that constitute MCS.

3. FAO 1981 EXPERT CONSULTATION

As part of the FAO EEZ Programme, FAO's Fisheries Department in April 1981 convened an Expert Consultation on Monitoring, Control and Surveillance Systems for Fisheries Management, at the Organization's headquarters in Rome.[9] Experts from 12 States (Australia, Argentina, Canada, Chile, Fiji, Iceland, Indonesia, New Zealand, Norway, Sierra Leone, United Kingdom, and the United States of America) participated in the consultation. It brought together a good balance of (i) regional perspectives, (ii) developing and developed States' interests and points of view, and (iii) experiences in MCS policy and operations.

The significance of the expert consultation was not only that it provided a comprehensive international assessment of MCS needs, problems and constraints vis-a-vis post-UNCLOS fisheries conservation and management requirements, but the consultation also laid the foundation for, and established the thrust of, FAO's MCS technical assistance activities.

The purpose of the expert consultation was to examine the basic concepts and issues for MCS systems for fisheries conservation and management, and in particular to (i) review the experience of present practices for MCS systems, (ii) analyze the various approaches to those practices, (iii) compile an inventory of the kinds of advice on MCS that could be available to developing countries, and (iv) formulate possible programmes for advice, training and assistance by FAO.

For the purpose of the consultation the following definitions for monitoring, control and surveillance were adopted.[10] These three inter-related activities were defined as:

> Monitoring - the continuous requirement for the measurement of fishing effort characteristics and resource yields.

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[8] Any fishing vessel operating within a State's EEZ may be inspected by authorized personnel as a means of enforcing national fisheries laws. However, only those vessels that have violated those laws can be arrested. Foreign flag vessels could be those vessels that are (i) fishing legally in a coastal State's EEZ under a licensing or joint-venture arrangement, or (ii) suspected of being involved in illegal fishing (i.e. poaching).

[9] FAO. 1981. "Report of an expert consultation on monitoring, control and surveillance systems for fisheries management". FAO Report FAO/GCP/INT/344/NOR. FAO. Rome (mimeo).115p.

[10] FAO continues to use these definitions, and in many respects they have become international standard terminology. However, the point is sometimes made that the terminology is tautological and that simpler terminology such as control and enforcement might be more appropriate in terms of describing MCS functions.

Control - the regulatory conditions under which the exploitation of the resource may be conducted.

Surveillance - the degree and types of observations required to maintain compliance with the regulatory controls imposed on fishing activities.

The expert consultation considered a comprehensive agenda, developing recommendations for the type of MCS technical assistance that FAO should provide.[11] The consultation noted that regional cooperation in MCS had distinct benefits, though there were difficulties with such cooperation in the area of enforcement because of sovereignty issues. The consultation agreed that FAO should continue to focus on strengthening the MCS capacities of its developing members through (i) the selective assignment of experts, (ii) providing investigative missions on a request basis, and (iii) the preparation and implementation of regional training courses. In this connection the consultation advised FAO to conduct MCS workshops within selected regions as a means of identifying the type of specific training and development required by particular regions and States within it.

With respect to regional training the expert consultation proposed that three levels of training be undertaken. These were (i) policy level training whereby senior policy makers would be involved so as to better understand the concepts and practices of MCS in terms of meeting the objectives of the coastal State, particularly within a regional context; (ii) system level training whereby individuals responsible for the subject in whole or in part (such as fisheries managers, coast guard etc) would be trained, including a possible sharing of facilities and courses that have already been established in other States, and (iii) operational level training whereby the staff involved in the day-to-day practical application of MCS systems would be trained within their respective regions.

FAO was further advised by the consultation to exercise extreme caution in the selection of MCS experts and advisers to be recruited for its assistance to developing members so as to ensure that biases for, or representation to acquire, certain equipment for MCS activities, were avoided. It was further recommended that FAO continue to prepare case studies of individual MCS systems as a means of generating information for the use of developing States in planning MCS systems. Significantly, the consultation highlighted the link between the cost of MCS systems and likely benefits to be accrued from enhanced fisheries conservation and management.

Although the expert consultation was convened more than a decade ago the recommendations made to FAO remain sound and valid, despite changing national and international fisheries circumstances, fleet movements, gear development and usage, and major advances in MCS technology.[12]

4. DISTRIBUTION AND TYPES OF MCS ASSISTANCE PROVIDED

FAO provides MCS technical assistance to its developing members on a request basis, using in-house or contracted expertise to deliver such assistance. Depending on particular needs and circumstances, the type and scope of assistance sought, and cost-effectiveness considerations, FAO's technical assistance can be provided either to a State or to a group of States on a regional basis. Where it is necessary to address specific MCS issues, assistance is normally provided on a national basis. However, with MCS training, or the consideration of common MCS issues and initiatives, delivery of assistance is more appropriate and effective through regional mechanisms.

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[11] The consultation agreed that regional cooperation in the following areas could be valuable (i) compilation of data of regional relevance, (ii) regional aerial surveillance, (iii) cooperative port inspection programmes, (iv) regional observer programmes, and (v) addressing the question of 'hot pursuit' of third party offenders into the jurisdiction of neighbouring States.

[12] The recommendations of the consultation continue to provide reasonable guidance to FAO in its efforts to deliver effective and relevant MCS technical assistance.

Appendix 1 provides a summary of MCS technical assistance provided by FAO to its developing members between 1980 and 1994.[13] The summary excludes (i) technical assistance related to assessments of fisheries situations and or general advice relating to fisheries policy and planning (ii) legislative assistance unless there was a clearly defined MCS component in the assistance (e.g. the 1992 assistance rendered to the Seychelles under the project title of "revision of fisheries legislation" which included a review of the country's MCS needs and current activities).

The information summarized in Attachment 1 is presented for projects (i) of a global nature, and (ii) by region/sub-region for Africa (East Africa and West Africa), Asia and the Pacific (South-East Asia, South Asia and the South Pacific), Latin America (Caribbean, Central America and South America), Near East, and Europe (Mediterranean). This information is further sub-divided with classifications for MCS technical assistance that has been provided by FAO (i) nationally to individual States, and (ii) regionally to groups of States.

4.1 Geographical areas assisted

Between 1980 and 1994 FAO provided MCS technical assistance in every region of the world. However, interestingly, the amount of MCS technical assistance rendered, either nationally or regionally, did not tend to reflect the relative economic and social importance of fisheries to individual States or groupings of States.[14] Rather, the pattern that has emerged with respect to the provision of MCS assistance reflects, inter alia, the existence of national and or regional organizations with a competence to undertake MCS activities, technical and other assistance from non-FAO sources, and at the national level, a reluctance by some States to involve outside organizations in areas that these States perceive as impinging upon national sovereignty.

At the national level there has been a strong focus of technical assistance in three sub-regions. These sub-regions were East Africa, West Africa, and especially in the early 1980s, South-East Asia. Lower levels of assistance have been provided to States in South Asia, the Near East, the Mediterranean, Central America, and South America. Over the review period no national MCS technical assistance was provided to States in the Caribbean.

Most regional MCS assistance provided by FAO has focused on three sub-regions: East Africa, West Africa and South-East Asia. No regional MCS technical assistance was provided to groups of States in South Asia, the Near East, the Mediterranean, Central America, South America, and the South Pacific.

4.2 Types of assistance

A review of the MCS technical assistance provided by FAO indicates that such assistance falls essentially into two categories: (i) national reviews of current MCS situations and, based on the particular needs of, and conditions in, States, the elaboration of policy options for enhancing such systems, and (ii) regional

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[13] Outside the scope of this paper is important MCS technical assistance and related support provided bilaterally and multilateral by developed States and other inter-governmental organizations. This assistance is provided to developing States and, in some instances, to regional fisheries organizations (e.g. the Organization of Eastern Caribbean States and the South Pacific Forum Fisheries Agency). In many respects this non-FAO technical assistance complements and strengthens the assistance provided by FAO. Important bilateral and multilateral MCS technical assistance and or equipment has been provided, inter alia, by Australia, Canada, the European Union, France, Germany, and the United States of America. Organizations such as the Commonwealth Secretariat and the Economic Community of West African States have assisted developing States with assessments of MCS capabilities and needs, and more recently, the World Bank and regional development banks (e.g. Asian Development Bank) have also provided funding to support MCS activities. This funding has been part of broader fisheries sector restructuring and management programmes as well as dedicated support for MCS activities.

[14] Assistance provided depended on requests from States, the eligibility of funding for such requests, and the availability of funds to meet such requests.

capacity building and institutional strengthening programmes. For policy reasons regarding its maintenance of neutrality vis-a-vis all members, FAO has not been involved in providing operational MCS assistance, though operational level training can be organized if appropriate funding is identified.

Appendix 1 details the objectives of MCS technical assistance provide by FAO, and these objectives indicate the type of assistance rendered. Prominent among national requests for assistance have been the evaluation of existing MCS arrangements, advice concerning the adoption of appropriate MCS arrangements or means to strengthen existing arrangements, assessment of institutional arrangements, and the evaluation of training needs. At the national level, requests for MCS assistance were often related to actual or perceived problems with the legal and illegal operation of foreign fishing fleets in the EEZs of the requesting States.[15]

All of the regional MCS technical assistance provided by FAO has been delivered through the Organization's regional fishery bodies or programmes. This assistance, both of a policy development and systems nature, has been delivered primarily in workshop mode where important common MCS issues have been addressed and evaluated.[16]

5. FUNDING

In order to meet the requests from its developing member for MCS technical assistance FAO has committed resources from the Organization's regular programme, including the Technical Cooperation Programme (TCP)[17], the Investment Centre[18] and, in addition, has used trust funds provided by other donor/aid agencies through trust fund arrangements.

5.1 Regular programme sources

Since 1980 regular programme funding has come both from the Fisheries Department budget and from TCP. This latter source of funding has played, and continues to play, an important role in meeting requests for MCS technical assistance. It is an effective source of funding because, within the prescribed criteria and regulations governing the use of these funds, requests from member States for assistance can be answered flexibly, speedily, economically and with maximum effect for the recipient.

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[15] While the operation of foreign fleets in the EEZs is of significance because of sovereignty considerations, States need to be encouraged to recognize that fishing activities by national and joint-venture fleets must also be subject to effective MCS if fisheries conservation and management objectives are to be achieved and sustainable resource utilization assured. Indeed, it is often these fleets that present the most severe threats to fisheries conservation and management because they tend to operate closer inshore where resources in the EEZ are subject to the most intense fishing effort and are less likely to be penalized in the event of violation.

[16] There has in fact been little emphasis on operational level training because such training tends to be somewhat sensitive and longer-term. However, such training has been undertaken as part of FAO's regional initiatives in the ASEAN.

[17] The TCP is an instrument for action which enables FAO to respond speedily to urgent requests for short-term assistance from developing members. It is an integral part of the Organization's regular programme, financed from the assessed budget. See FAO. 1983. "FAO Technical Cooperation Programme guidelines for the information of governments". FAO. Rome. (mimeo). 6p. plus annexes and appendixes.

[18] The FAO Investment Centre is part of the Organization's Development Department. The Investment Centre has two main programmes: (i) the FAO/World Bank Cooperative Programme (CP) which works exclusively on projects for financing by the World Bank/IDA, and the Investment Support Programme (ISP) which works with the other 14 multilateral financing institutions that have cooperative agreements with FAO. See FAO. undated. FAO's Investment Centre. FAO. Rome. 17p.

As indicated in Appendix 1 the Fisheries Department regular programme has funded three MCS projects between 1980 and 1994. Two of these projects were funded in 1994 and involved (i) the preparation of an MCS manual, and (ii) an investigation mission to assess the needs for a workshop on fishery MCS in East Africa. The third project was undertaken in 1980 and involved a review of MCS policy and approaches in the Federated States of Micronesia (formerly part of the US Trust Territory of the Pacific Islands) in the South Pacific.

5.2 Trust fund support

Since 1979 Norway has been the major national trust fund donor providing support to MCS activities through the establishment of the FAO/Norway EEZ Programme (1982-1985), which was part of the overall FAO EEZ Programme. In the initial phase of the FAO/Norway EEZ Programme three fisheries sub-programmes were supported. These sub-programmes were (i) policy and planning missions, (ii) MCS, and (iii) fisheries law advisory services. Under these sub-programmes advisory services, training activities and basic studies were undertaken.

Following the review of the FAO/Norway EEZ Programme in December 1986,[19] it was recommended that programme be continued, and in July 1989 a successor programme, the FAO/Norway Fisheries and Law Advisory Programme (FIMLAP) (1989-82), took effect.

FIMLAP covered two broad areas of assistance. These areas were (i) fisheries management, including policy and planning; assessment of country situations, diagnosis and quantification of opportunities and problems, formulation of national and regional policies and strategies, formulation of national management and development plans, institutional arrangements for management and development, and (ii) fisheries legislation, including the drafting of laws and regulations, preparation for negotiation of joint ventures and bilateral fisheries agreements, aspects of international cooperation, and licensing systems.

In December 1992 FIMLAP was also evaluated and it was recommended that the programme continue for a further four years.[20]

UNDP funding was also substantial and important for the implementation of the FAO EEZ Programme. However, UNDP funding was devoted principally to the maintenance and expansion of the network for sub-regional and regional technical assistance through such FAO projects and programmes as the Fishery Committee for Eastern Central Atlantic (CECAF), South-West Indian Ocean Programme (SWIOP) and the South China Sea Fisheries Development and Coordinating Programme (SCSFDCP). UNDP funding for these FAO projects and programmes ceased with new directions for UNDP development assistance.

Between 1980 and 1994 the greater part of MCS activities executed by FAO has been funded either by FAO's regular programme or under the FAO/Norway EEZ Programme. Funding from other FAO members has been of minor importance. Australia has funded MCS activities (e.g. in Southeast Asia under the SCSFDCP), as have France and the United States of America.[21]

FAO's financial capacity to meet developing member requests for MCS technical assistance is limited by regular programme funding constraints. For this reason on-going trust fund support will be necessary if FAO is to maintain the level and scope of MCS assistance that has been provided in the past.

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[19] Doucet, F. J., C. Fernando, M. Hauge and G. Ulfstein. 1987. "Report of the FAO/Norway evaluation of the EEZ umbrella programme". FAO Report (FI:GCP/INT/441/NOR). FAO. Rome. (mimeo). 119p.

[20] de Almeida, J. J., R. L'Hereux, T. Loebach, and H.D. Walters. 1992. "Fisheries Management and Law Advisory Programme report of the joint review mission". FAO Report GCP/INT/466/NOR Field Report 92/23. FAO. Rome (mimeo). 52p.

[21] With the exception of these latter two FAO members, no significant funding has been provided directly for MCS activities by States with distant-water fishing interests, either through FAO or on a bilateral basis.

6. ASSESSMENT OF TECHNICAL ASSISTANCE PROVIDED

It is difficult to assess precisely, and in an objective manner, the impact that the MCS technical assistance provided by FAO has had on fisheries conservation and management in recipient States.[22] However, fisheries resources in the EEZs of many developed and developing States are poorly managed: resources continue to be overfished, national and foreign fleets operate without effective licensing and reporting requirements, fishing effort and output is not controlled, and MCS measures are ineffective and sometimes thwarted by lack of clear definition and support at the political level.[23] Consequently, the additional benefits that were anticipated by States in the 1970s from the introduction of a new regime for the international governance of the world's oceans, as embodied in the 1982 Convention, have not been realized fully.[24]

FAO regards the provision of MCS technical assistance to national fisheries administrations and or regional fisheries organizations as being an essential component of capacity building and institutional strengthening so that in the longer run developing States will be better placed to more effectively conserve and manage their fisheries resources. However, capacity building is a slow process, often requiring many years of consistent and costly application before policies and programmes are established firmly and the benefits of assistance provided become apparent.[25]

Given (i) the state of most of the world's fisheries, and (ii) the level of MCS activities in many developing States, it would seem, from observation, that substantial short-term impacts were not realized from the MCS technical assistance provided since 1980 by FAO. However, it should be recognized that there are some MCS systems in place that have been influenced by FAO assistance, and that there are good prospects for these systems to be strengthened further. In the longer term, acknowledging that national capacity building and institutional enhancement is a slow process, it might be anticipated that FAO's past technical assistance will impact fisheries conservation and management more significantly.

It is being increasingly realized that the best prospects for strengthening the MCS capacity of developing States lies in regional cooperation. Indeed, given the scarcity of resources with which to support national MCS programmes and the variable results achieved from these programmes, developing States with common fisheries and fishing interests have demonstrated that significant progress towards enhancing fisheries conservation and management can be made through regional MCS initiatives. Developing States are therefore being urged to assess and address MCS both in terms of national programmes and through regional, cooperative networks.

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[22] FAO has not undertaken a comprehensive assessment of the MCS technical assistance provided to its members.

[23] The matter may be further complicated by confusion over responsibilities concerning national sovereignty, fisheries conservation and management issues, and which agency within the administration has lead responsibility for MCS.

[24] For a review of the world's fisheries situation, including aspects relating to over-capitalization, the impact of subsidies, over-fishing, and the status of fish stocks, see relevant sections of (i) FAO. 1993. "Marine fisheries and the law of the Sea: A decade of change". (Special chapter (revised) of The State of Food and Agriculture 1992). FAO Fisheries Circular No. 853. FAO. Rome. 66p., and (ii) FAO. 1994. "Review of the state of world marine fishery resources". FAO Fisheries Technical Paper 335. FAO. Rome. 136p.

[25] The challenges associated with strengthening MCS capacity in developing States is part of the broader requirement associated with strengthening fisheries administration generally. Until such administration is improved the capacity of developing States to 'absorb' MCS technical assistance will be constrained.

7. CONCLUSION

Requests for MCS technical assistance by FAO's developing members are expected to remain high as a consequence of a number of factors including:

(i) increased realization by States that MCS is an integral and essential component of fisheries conservation and management and that prospects for achieving conservation and management objectives and sustainable development will be limited in the absence of effective MCS;

(ii) recognition that fisheries falling under national jurisdiction will become subject to greater international scrutiny with respect to the nature and effectiveness of conservation and management measures adopted and implemented. In this connection the international community will expect States to take concrete steps towards implementing the goals and objectives of sustainable development as set out in the Rio Declaration on Environment and Development and Agenda 21: The United Nations Programme of Action from Rio, and

(iii) acknowledgement that fishing on the high seas carries with it substantial flag State responsibilities that must be fulfilled through States having greater control over the operation of their fleets. To this end States may need to adopt measures associated with the implementation of the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, concluded in 1993 under FAO auspices, and the outcomes of international negotiations, and in particular those parts relating to MCS, for the FAO-sponsored Code of Conduct for Responsible Fisheries and the United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks.

At the 1992 FAO Technical Consultation on High Seas Fishing (Rome, 7-15 September 1992),[26] the various sessions of the United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks (New York, 1993-1995),[27] the 1994 FAO Technical Consultation on the Code of Conduct for Responsible Fishing (Rome, 26 September to 5 October 1994),[28] there has been considerable discussion and debate on the central role of MCS in fisheries conservation and management. This attention to MCS indicates the international recognition of the need for cost-effective MCS systems, both within EEZs and on the high seas, if long-term, sustainable fisheries conservation and management is to be achieved.

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[26] FAO. 1992. "Report of the technical consultation on high seas fishing". FAO Fisheries Report No. 484. FAO. Rome. 85p.

[27] See Part V (articles 18-20) of the Chairman's "Draft Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks". United Nations General Assembly. 23 August 1994. A/CONF.164/22. United Nations. New York. 34p.

[28] FAO. 1994. "Report of the technical consultation on the Code of Conduct for Responsible Fishing". FI:CCRF Report. FAO. Rome. 20p.

APPENDIX 1

SUMMARY OF NATIONAL AND REGIONAL MCS TECHNICAL ASSISTANCE PROVIDED BY FAO TO MEMBERS, 1980-1994

Region/ project funding code[30]	Year[29]	Title/purpose/scope/related activities/outcome
1. GLOBAL		
FAO headquarters (GCP/INT/344/NOR)	1981	Expert consultation on monitoring, control and surveillance systems for fisheries management (Rome, Italy, 27-30 April 1981, 118p.). To (i) review the experience of present practices of MCS systems, (ii) analyze the various approaches to those practices, (iii) compile an inventory of the kinds of advice on MCS that could be made available to developing countries, and (iv) formulate possible programmes for advice, training and assistance by FAO. This expert consultation laid the foundation for FAO's future assistance to developing member States in the area of MCS. Experts from Australia, Argentina, Canada, Chile, Fiji, Iceland, Indonesia, New Zealand, Norway, Sierra Leone, United Kingdom, and the United States of America participated in the consultation. A report of the expert consultation was prepared and distributed widely. (Microfiche no. 8226011-021)
FAO headquarters (FI regular programme)	1994	Preparation of manual entitled "Introducing Monitoring, Control and Surveillance: A Tool in Fisheries Management". To formulate a manual that would address (i) MCS: what is it, (ii) the components of an MCS system, and (iii) introducing/upgrading an MCS system. A manual by the consultant was prepared and it will be distributed as an FAO publication, probably in 1994.

[29] Projects are ranked by year of funding.

[30] The project funding code for each project indicates the funding source: FI regular programme is regular programme funding from the Fisheries Department; TCP indicates regular programme funding under FAO's Technical Cooperation Programme; GCP/INT/344/NOR, GCP/INT/370/NOR, GCP/INT/399/NOR, and GCP/INT/400/NOR indicate Norwegian funding for MCS activities under the FAO/Norway EEZ Programme; GCP/INT/466/NOR indicates Norwegian funding under the FAO/Norway Fisheries Management and Law Advisory Programme; SWIOP, CECAF and SCS indicate UNDP funding for FAO executed projects/programmes; Investment Centre denotes funding under the CP and ISP.

2. AFRICA

2.1 East Africa

National

Maldives (GCP/INT/334/NOR) (GCP/RAS/087/NOR)	1981	Management of fisheries in the exclusive economic zone. MCS was assessed as part of a larger study. To evaluate the situation with respect to MCS needs and to propose recommendations for a viable and cost-effective MCS system. A consultancy report was prepared. (Microfiche no. 8218009).
Mauritius (GCP/INT/399/NOR) (GCP/INT/400/NOR)	1984	Licensing and control of foreign fishing. To assess policy options for the licensing of foreign fleets in the EEZ and the adoption of appropriate MCS arrangements. A consultancy report for the project was prepared. (Microfiche no. 84W01111).
Madagascar (GCP/INT/399/NOR) (GCP/INT/400/NOR)	1984	Licensing and control of foreign fishing. To assess policy options for the licensing of foreign fleets in the EEZ and the adoption of appropriate MCS arrangements. A consultancy report for the project was prepared. (Microfiche no. 84W01110).
Comoros (GCP/INT/400/NOR)	1985	Licensing and control of foreign fishing. To assess policy options for the licensing of foreign fleets in the EEZ and the adoption of appropriate MCS arrangements. A consultancy report for the project was prepared. (Microfiche no. 85M02657).
Mozambique GCP/MOZ/038/NOR	1987	Revision of fisheries legislation. As part of a broader study to advise on matters pertaining to MCS, including an assessment of existing and expected MCS needs, means of controlling national, joint-venture and foreign fishing vessels, and administrative responsibility for MCS in the government. A consultancy report was prepared. (Microfiche no. 3013555 final report of project).
Seychelles (TCP/SEY/0155)	1992	Revision of fisheries legislation. To analyze (i) existing laws and regulations relating to fisheries, in particular with respect t o the role of the foreign fishing fleet, (ii) the development of the national artisanal fleet, (iii) conflicts between fisheries (FADs etc) and MCS. A review of MCS activities was undertaken in conjunction with a legislative review. Consultancy (FL/IOR/92/30 98p.) and terminal reports for the project were prepared. (Microfiche no. 329953).

Regional

West Indian Ocean (SWIOP)	1982	Southwest Indian Ocean project on monitoring, control and surveillance (Mahe, Seychelles, 20-25 September 1982). To assess the status and needs of MCS among countries of the Southwest Indian Ocean and to develop recommendations for follow-up assistance for countries. Participants from Mauritius,

		Mozambique, Tanzania and the Seychelles attended the workshop. A workshop report (RAF/79/065/WP/4/82 18p.) was prepared and distributed. (Microfiche no. 86X01677).
West Indian Ocean (SWIOP)	1984	FAO/Southwest Indian Ocean Committee workshop on licensing and control of foreign fishing (Mahe, Seychelles, 21-26 May 1984). To provide, as necessary, advice to participants of the workshop on the technical and operational aspects of national and regional management of natural resources. Participants from Madagascar, Maldives, Mauritius, Seychelles, Somalia, Sri Lanka, and the South Pacific Forum Fisheries Agency attended the workshop. A workshop report was prepared and distributed. (Microfiche no. 89X00042).
West Indian Ocean (FI regular programme)	1994	Investigation mission on the needs for a workshop on fishery monitoring, control and surveillance in the West Indian Ocean region. To (i) visit the Seychelles, Madagascar, Mauritius, Kenya and Tanzania,(ii) review MCS needs, activities and resources in each country, (iii) identify the scope and content of a regional MCS workshop, and (iv) advise on a suitable time and location for a workshop. A consultant's report was prepared and appropriate recommendations made.

2.2 West Africa

National

Cape Verde (GCP/INT/399/NOR)	1985	Control over fisheries in the exclusive economic zone. To (i) specify a minimum system for fisheries control, (ii) identify means by which such a system can pay for itself by considering other than fisheries tasks, (iii) ensure that bilateral fisheries agreements are on an equitable basis to both parties, (iv) identify inputs for the MCS system, (v) consider means by which the safety at sea of artisanal fishermen might be enhanced, and (vi) identify types of regulations that might be incorporated in the law to facilitate control. A consultancy report was prepared. (Microfiche no. 86X00973).
Sierra Leone (TCP/SIL/6654)	1988	Support to the Fisheries Division. To (i) examine the present pattern of industrial fishing and existing MCS procedures, (ii) review possible changes in the pattern of industrial and artisanal fishing, (iii) propose alternative MCS procedures which might be appropriate to the Sierra Leone situation, given the probable magnitude of the importance of the industrial fisheries and the relative costs of proposed MCS procedures. A consultancy report was prepared. (Microfiche no. 322987).
Angola (GCP/INT/466/NOR)	1991	Proposal for the creation of a marine fisheries inspection facility. To (i) evaluate the economic importance of the fisheries sector, (ii) outline measures for fisheries conservation, (ii) assess fisheries statistical needs in support of MCS, (iv) propose a structure for a marine fisheries inspection's service, (v) outline intermediate steps towards implementing such a service, and (vi) detail the competence and responsibilities for the inspection's service. A consultancy report (GCP/INT/466/NOR Field Report 91/10) was prepared. (Microfiche no. 320327).

Cape Verde (TCP/CVI/2252)	1993	Implementation of a new fisheries policy. To evaluate the current MCS situation and recommend cost-effective and realistic measures to be implemented to enhance the country's MCS capacity. The consultancy was undertaken in conjunction with a review of fisheries strategies, the administrative structure of the fisheries administration, and fisheries legislation. An MCS report, together with other reports, including a terminal project report, were produced.
Ghana (Investment Centre)	1994	Fisheries sector capacity building project. As part of a fisheries sector project, the MCS component was to (i) assess the current status of MCS, (ii) propose means for reinforcing the MCS system with consideration of offshore, coastal and inshore operations, and (iii) consider fisheries research aspects in support of MCS. An MCS report, with recommendations, was incorporated in the project preparation report (Report No: 61/94 CP-GHA 30).
Regional		
CECAF membership (CECAF project)	1980	The enforcement of fisheries regulations. To outline enforcement implications of the management of fish stocks, common standards for enforcement, and national considerations in relation to enforcement (enforcement organization, patrol vessels and their requirements, aircraft surveillance, bilateral fishery agreements and license controls, the use of force and making the enforcement task effective). The consultant's report (CECAF/TECH/80/22) contains recommendations for implementation by CECAF countries. (Microfiche no. 8108997).
CECAF membership (GCP/INT/370/NOR)	1981	Study of aerial fisheries surveillance as part of MCS system in certain West African coastal States of the CECAF region. To (i) highlight some operational considerations for fisheries surveillance in the CECAF region by small aircraft, including platform characteristics, pre-flight information requirements, patrol area, and post-flight debriefing; to determine what factors, if any, limit/or undermine the effectiveness and efficiency of aerial fisheries surveillance (AFS) in the region; (ii) determine the present enforcement limits placed on AFS by examining the national fisheries legislation of selected CECAF member States, and (iii) explore the concept of regional and sub-regional assistance (cooperation) in the field of fisheries surveillance. A consultant's report with recommendations for West African States was prepared. (Microfiche no. 8328845).
CECAF membership project)	1981	Meeting on monitoring, control and surveillance (Freetown, (CECAF Sierra Leone, 30 June to 3 July 1981). To (i) review the report of the expert consultation on MCS held at FAO headquarters (Rome, 26-30 April 1981), (ii) review the status of the MCS situation in some CECAF countries, and (iii) develop follow-up action. Participants from the Gambia, Ghana, Guinea, Liberia, Morocco, Nigeria, Senegal, and Sierra Leone attended the workshop. A workshop report (CECAF/TECH/81/35) was produced and distributed to CECAF member States. A CECAF training course on MCS was held in Dakar, Senegal, in June 1982 as a follow-up activity to the workshop. (Microfiche no. 8224347).

West African States (GCP/INT/466/NOR)	1992	Regional workshop on monitoring, control and surveillance for African States bordering the Atlantic Ocean (Accra, Ghana, 2-5 November 1992). To (i) review the status of resources and fleet operations in the West African region, and (ii) identify problems and constraints associated with MCS operations. The workshop was attended by participants from Angola, Benin, Cape Verde, Congo, Cote d'Ivoire, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Mauritania, Morocco, Nigeria, Senegal, Togo, and Zaire. Special participants came from the Canadian International Development Agency, Commission of the European Communities, German Agency for Technical Cooperation, Ministerial Conference on Fisheries Cooperation among African States bordering the Atlantic Ocean, Norwegian Agency for International Development, Permanent Secretariat of the Sub-regional Commission for Fisheries and the United Nations Development Programme. A workshop report (GCP/INT/466/NOR Field report 92/22), including recommendations for further action by West African States, was prepared for the project and distributed widely. (Microfiche nos. 329825-35 (En) and 329837-47 (Fr)).
West African States (RAF/88/047)	1992	Survey and analysis of sub-regional monitoring, control and surveillance mechanisms in coastal States of West Africa. As part of a broader regional fisheries study to (i) conduct a survey of existing and planned surveillance facilities and mechanisms in the ECOWAS region describing the types and functions of both equipment and personnel attached to maritime surveillance programmes, (ii) assess the operational effectiveness of maritime surveillance programmes, and (iii) make observations and recommendations on further sub-regional cooperation to improve the coverage needed in both time and space. A consultancy report was published and distributed. (Microfiche no. 328919).

3. ASIA AND THE PACIFIC

3.1 South-East Asia

National[31]

Malaysia (SCS project)	1982	Monitoring, control and surveillance identification mission. To (i) assess the MCS situation in Malaysia, and (ii) propose means of enhancing the country's MCS system. The mission report (not published) was used for planning the regional MCS project RAS/86/115 (see below).

[31] In Doucet, F. J., C. Fernando, M. Hauge and G. Ulfstein. 1987. "Report of the FAO/Norway evaluation of the EEZ umbrella programme". FAO Report (FI:GCP/INT/441/NOR). FAO. Rome. (mimeo). 119p. (Microfiche no. 304739), it is noted that a MCS mission was undertaken to Malaysia to report on the Malaysian fisheries licensing system and license data storage. While such a study has MCS implications, it is not considered to be of a primary MCS nature in the context of this paper.

Indonesia (SCS project)	1982	Monitoring, control and surveillance identification mission. To (ii) assess the MCS situation in Indonesia and (ii) propose means of enhancing the country's MCS system. The mission report (not published) was used for planning the regional MCS project RAS/86/115 (see below).
Thailand project)	1982	Monitoring, control and surveillance identification mission. To (SCS (i) assess the MCS situation in Thailand and (ii) propose means of enhancing the country's MCS system. The mission report (not published) was used for planning the regional MCS project RAS/86/115 (see below).
Malaysia (Investment Centre)	1985	Fisheries sector project in Peninsula Malaysia (FAO/Asian Development Bank Cooperative Programme). To provide advice, inter alia, on a proposed programme for strengthening the fisheries enforcement unit. The consultant's report (12/85 AS-MAL.10) was incorporated into the final document for the project.
Myanmar (GCP/INT/466/NOR)	1992	Monitoring, control and surveillance of the fisheries within the exclusive economic zone. To advise on ways and means of strengthening current MCS systems, including information and intelligence, enforcement, training, communications, command, control and coordination. A review of fisheries legislation was undertaken in connection with this consultancy. A consultancy report (Field Report 92/18) for the project was prepared. (Microfiche no. 329959).
Indonesia (TCP/INS/2252)	1992	Development of MCS of fishing operations. To (i) establish an institutional and legal framework for MCS, (ii) prepared job descriptions for each post in the MCS division, (iii) prepare a MCS manual for use by enforcement officers, (iv) oversee the preparation of a detailed manual on the operation and maintenance of satellite tracking, (v) organize training courses and develop training materials, (vi) identify constraints and problems in the existing institutional arrangements and propose solutions, (vii) recommend locations for MCS centres in the country, (viii) assess whether satellite tracking is a suitable technology for use in the country, and (ix) install, demonstrate and test satellite tracking devices on a sample of vessels. Consultancy and terminal reports were prepared.
Cambodia (TCP/CMB/2253)	1993	Fishery sector programming mission: Rehabilitation and development needs. As part of a fisheries sector review, the MCS component was to (i) review the existing MCS systems in the inland and marine fisheries and assess their effectiveness, (ii) assess MCS training and equipment needs, and (iii) propose measures for strengthening MCS. MCS matters, with recommendations, were addressed in the mission report (FI;TCP/CMB/2253(F)). A terminal report for the project was also prepared. (Microfiche no. 336765).

Regional

ASEAN (SCS project)	1981	Regional seminar on monitoring, control and surveillance of fisheries in exclusive economic zones (30 November-4 December, Jakarta, Indonesia). To (i) bring together those countries party of the SCSP as well as certain interested governments of the region to gain knowledge of the value and feasibility of various systems of MCS to compare practices and problems with a view to increasing national competence, and (ii) find areas of commonality of approach for possible later joint resolution. Participants came from Australia, Brunei, Indonesia, Malaysia, Philippines, Singapore, Thailand, and the United Nations Development Programme. A conference report (SCS/GEN/81/31) with recommendations for follow-up by the South China Sea Programme was prepared. (Microfiche no. 8217931-35).
ASEAN (GCP/INT/399/NOR)	1982	Assistance to the ASEAN countries in the monitoring, control and surveillance of fisheries in the exclusive economic zones. To generally assess the MCS situation within the ASEAN region, including the organization of MCS systems, information and communication, training, technical assistance, regional cooperation, resource evaluation, licensing and intelligence data and legal aspects. The consultant's report was used as planning document for the regional workshop held under RAS/86/115 (see below).
ASEAN (SCS project)[32]	1989 to 1991	Monitoring, control and surveillance of fisheries in the exclusive economic zones of ASEAN countries. To (i) provide assistance to individual national governments through existing and designated regional mechanism (the ASEAN) aimed at enhancing national capabilities to realize optimal economic benefits from the scientific utilization of living marine resources in their EEZs, and (ii) work toward cooperative arrangements for the national exploitation of shared migratory stocks. Institution building was seen as an intermediate objective in moving towards the prime objective. The project emphasized training (two regional training courses, one workshop, and a study tour of MCS facilities/work in Australia) and the provision of ad hoc MCS advice to participating developing States. A project report was prepared. (Microfiche no. 329111).

3.2 South Asia

National

Sri Lanka (GCP/INT/399/NOR)	1981	Exclusive economic zone: A preliminary assessment of fisheries problems. To assess the MCS situation in the country, in terms of the need to quantify the problem and allocate priorities, fisheries intelligence, offshore resources, aerial surveillance, patrol vessels, control and command, and licence conditions. A consultancy report was prepared.

Regional — None

[32] Funded with Australian trust funds.

3.3 South Pacific

National

Federated States Micronesia (FI regular programme)	1980	Control and surveillance of foreign fishing effort in the of extended fishery zone. To provide advice on policies and system for surveillance, enforcement and the operational aspects of EEZ control. A report with recommendations was prepared
Regional		None[33]

4. LATIN AMERICA

4.1 Caribbean[34]

National		None
Regional		None

4.2 Central America

National

Belize (TCP/BZE/2251)	1992	Fisheries legislation revision and training for monitoring, control and surveillance. To (i) upgrade the capabilities and knowledge of the staff involved in fisheries MCS, and (ii) provide a core group the sufficient strength to undertake MCS duties on a wider basis within the context of the extended limits of national jurisdiction in respect of fisheries protection. The assistance involved (i) dedicated on the job MCS training, and (ii) a formal training course for MCS staff. A review of the fisheries legislation was also undertaken as part of the technical assistance. Consultancy and terminal reports for the project were prepared.
Regional		None

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[33] On page 91 of Doucet, F. J., C. Fernando, M. Hauge and G. Ulfstein. 1987. "Report of the FAO/Norway evaluation of the EEZ umbrella programme". FAO Report (FI:GCP/INT/441/NOR). FAO. Rome. (mimeo). 119p., it is noted that a "Report on control and surveillance to the South Pacific Forum Fisheries Agency" was provided in 1984. The report is not available in FAO. It would appear that this report may have been related to the operations of distant-water fishing nation fleets in the region, and not MCS directly.

[34] Since 1980 FAO has provided a significant amount of technical assistance in the fisheries and legislative areas to Caribbean States, the OECS and the CARICOM. However, this assistance has not focused primarily on MCS.

4.3 South America

National

Venezuela (TCP/VEN/0151)	1993	Strengthening of the organizational structure of the fisheries sector. To (i) assess the country's existing MCS capabilities and evaluate their effectiveness, (ii) describe MCS policy and mechanisms within the government for determining such policy, including operational and logistical responsibilities for MCS, (iii) outline the legislative basis for MCS and comment on its operational appropriateness, (iv) identify major MCS problems being encountered and assess the likely trend of such problems, (v) propose a cost-effective and comprehensive MCS plan for the country based on demonstrated needs, including conventional and other measures as may be appropriate to achieve efficient MCS operations, (vi) in support of the proposed MCS plan, detail manpower and training requirements, (vii) review the current organizational structure for MCS responsibilities in the country and propose, if necessary, a reorganization in order to streamline policy development, the implementation of such policy and operational aspects, and (viii) in formulating recommendations for a draft MCS plan, develop a schedule for implementation over three to five years. Consultant and terminal reports were prepared.

Regional None

5. NEAR EAST

National

Yemen (GCP/INT/399/NOR) (GCP/INT/400/NOR)	1985	Assessment of requirements for the monitoring, control and surveillance of fisheries. To (i) identify the basic information required for MCS and the essential kinds of equipment needed for MCS, (ii) identify the institutional requirements and manpower and training needs for the establishment of an MCS system, and (iii) assess the likely timeframe and costs and benefits of introducing alternative MCS systems. The fisheries administrative and legal framework was undertaken as part of the consultancy. A consultancy report (FL/IOR/85/18) for the project was prepared.
Yemen (TCP/PDY/8954)	1989	Strengthening marine inspection and supervision. To train Yemeni officers in the field of fisheries MCS. On the job and formal training session were conducted by an FAO consultant. Consultancy and terminal reports for the project were prepared.

Regional None

6. EUROPE

6.1 Mediterranean

National

Malta (TCP/MAT/0052)	1992	Agricultural sector review in Malta with particular reference to joining the European Community. For the fisheries component of the study the task was to review the fisheries sector and to assess the appropriateness of fisheries policies and practices, including MCS. Consultant and terminal reports were prepared. (Microfiche no. 338429).
Albania (TCP/ALB/2253)	1994	Assistance for the reorganization and rehabilitation of the fisheries sector. To (i) analyze and advise on the advantages and disadvantages linked to possible options for MCS of marine fisheries in Albanian territorial waters, and (ii) advise on the most suitable satellite tracking technology in respect of foreign vessels permitted to fish in Albania. Consultant and terminal reports are under preparation.
Regional		None